

NOTES

CREPIS ZACINTHA (ASTERACEAE), ADVENTIVE IN TEXAS, AND THE FIRST RECORD IN NORTH AMERICA—A roadside weed, *Crepis zacintha* (L.) Babc., new to Texas and new to North America (Kartesz, in press) was recently collected from Waller County, Texas. A key to the four species of *Crepis* in Texas and a description and an illustration of *C. zacintha* are included.

In April 1992, the junior author collected a weedy plant at the base of a state highway department gravel mound along old highway 90 west of Brookshire in Waller Co., Texas. The initial observation revealed the weed a member of the tribe Lactuceae of the family Asteraceae. Its predominantly basal, lyrate-pinnatifid leaves; paniculate inflorescence; small heads; phyllaries of two-size classes; naked receptacle; yellow ligules; 10-ribbed, unbeaked fruits; and white, capillary, deciduous pappus bristles suggested the specimen belonged to the genus *Crepis* L. It differed, however, from the three *Crepis* species reported from Texas, i.e., *C. capillaris* (L.) Wallr., *C. pulchra* L., & *C. runcinata* (James) Torr. & Gray (Correll & Johnston 1970, Hatch et al. 1990, Johnston 1990) in several characters, especially in the mature inner phyllaries being indurate, strongly angular, completely enclosing fruits and also in fruit apices being almost bent at right angles.

The authors speculated the weed to be an adventive species, possibly from the Old World. The senior author identified it to *Crepis zacintha* (L.) Babcock in the Asteraceae treatment by P.D. Sell in the 4th volume of *Flora Europea* (Tutin et al. 1976). Although Sell's description of *Crepis* section *Zacintha* (Miller) Babcock and of *C. zacintha* applied well to the specimen, his description neither mentioned the indurate nature of the mature inner phyllaries nor the bent apices of the fruits. Since these characters appeared to be diagnostic, there was some doubt about the identity of the specimen. However, we found that Babcock's (1947, pp. 760–762) detailed description of *C. zacintha* accounted well for each aspect of the specimen.

KEY TO THE SPECIES OF *CREPIS* IN TEXAS

1. Inflorescence dichotomously cymose with some heads sessile at or near bifurcations, the other heads pedunculate; mature inner phyllaries indurate, strongly angular with the upper half nearly horizontal, completely enclosing fruits and pappus, more or less fused with the fruit pericarp; principal leaves (excluding bracteal ones) basal or nearly so at anthesis *C. zacintha*
1. Inflorescence various, but all heads pedunculate; mature inner phyllaries reflexed; principal leaves basal or cauline at anthesis 2
2. Principal leaves basal or subbasal; perennials with woody or fleshy caudex *C. runcinata*
2. Principal leaves cauline; annuals with no permanent caudex 3

3. Stem base with glandular and eglandular hairs; pappus rather persistent; plants present in E Texas *C. pulchra*
3. Stem base glabrous or with eglandular hairs; pappus caducous; plants present in the Trans-Pecos area of Texas *C. capillaris*

***Crepis zacintha* (L.) Babcock**, Univ. Calif. Publ. Bot. 19:404. 1941. (Fig. 1).
Lapsana zacintha L., Sp. Pl. 2: 811. 1753. *Rhagadiolus zacintha* (L.) Desf., Fl. Pedem. 1:227. 1785. *Zacintha verrucosa* Gaertn., Fruct. 2:358. 1791.

Annuals, lactiferous, 20–30 cm high; stems usually branched above or near base, pubescent below, glabrous above. Leaves basal and cauline; basal leaves lyrate-pinnatifid with the terminal segment the largest, pubescent, 10–20 cm long and 2–4 cm wide; cauline leaves similar to the basal ones, but smaller, sessile, and auriculate, the lower and median ones deciduous, the upper ones bracteal. Inflorescence dichotomously cymosely branched, with some heads sessile at or near bifurcations, and other heads peduncled; peduncles fistulose, 1–3 cm long. Heads many, ligulate. Involucre 5–7 mm long, 3–7 mm wide, of two series; outer phyllaries 5, unequal, the longest one ca. half the length of the inner phyllaries, glabrous or tomentulose at the base; inner phyllaries 10, lanceolate, obtuse, ciliate at apex, glabrous or tomentulose at base; lower half of each inner phyllary becoming indurate after anthesis, strongly angular, with the upper half nearly horizontal, completely enclosing fruits and pappus, more or less fused with the fruit pericarp. Receptacle naked. Flowers ca. 30, bisexual; corolla yellow or yellow on the inner surface and purplish-red on the outer surface, 5-toothed, pubescent, the tube ca. 1.4 mm long, the ligule ca. 5.6 mm long and 1.2 mm wide; anthers ca. 2.8 mm long; style branches ca. 1 mm long. Fruits yellowish, with their apices bent at almost a right angle, often dimorphic: marginal fruits, if present, laterally strongly compressed, 2–2.5 mm long, glabrous or pubescent; inner fruits subterete, ca. 2.5 mm long, 10-ribbed. Pappus of 8–15, white, capillary bristles, ca. 1.5 mm long, deciduous (description adapted from Babcock).

Specimen observed from the NEW WORLD: U.S.A. TEXAS. Waller Co.: state hwy department gravel mound along old U.S. 90, ca 1/2 mi W of Brookshire and across hwy from roadside park, 18 Apr 1992, *L.E. Brown 15947* (NCU, SBSC).

Specimen observed from the OLD WORLD: GREECE. Thessaly, below Kastanea, toward Kalabaka, 8 Jul 1930, *Babcock 349*; Hort. Genet. California (US!; grown from seeds collected by Babcock).

Crepis zacintha is a native of the Mediterranean region. We are uncertain regarding the mode of the introduction of this species to Texas, since we have found no record of its existence anywhere else in North America.

Because of its unique morphology, Hoffmann (in Engler & Prantl 1897, p. 360) recognized *C. zacintha* in the monotypic genus *Zacintha* P. Miller as *Z. verrucosa* Gaertn. However, Babcock (l.c.) asserted that its close relationship with *C. dioscoridis* L., justified its disposition in *Crepis*.



FIG. 1. *Crepis zacintha* (From: Babcock 1947, with permission).

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CHAMAESYCE VELLERIFLORA (EUPHORBIACEAE) NEW TO TEXAS AND U.S.A.—While conducting field surveys of the botanical resources of eleven United States Navy properties in South Texas during 1991–1992, the senior author encountered a plant species new to his experience. The junior author, who is familiar with the *Chamaesyce* of northern Mexico, identified a specimen as *Chamaesyce velleriflora* (Kl. & Gke.) Millsp. (*Euphorbia velleriflora* (Kl. & Gke.) Boiss. This species was not reported in Wheeler's (1941) treatment of the genus *Chamaesyce* (as *Euphorbia* subgenus *Chamaesyce*) for the USA and Canada exclusive of Hawaii and southern Florida, the *Manual of Vascular Plants of Texas* (Correll & Johnston 1970), the latest update to that manual (Johnston 1990), *Checklist of the Vascular Plants of Texas* (Hatch et al. 1990), or the *Flora of the Texas Coastal Bend* (Jones 1977).

The matlike growth, semiprostrate stems, opposite leaves, and interpetiolar stipules of *C. velleriflora* identify it as a member of *Chamaesyce*, which has often been included in *Euphorbia*. In Correll & Johnston (1970), *C. velleriflora* would key (in *Euphorbia*) to couplet 64 or higher; of the available choices, its characteristic branching and cyathium arrangement of modified laterals bearing dense elongate clusters of cyathia are closely similar to *C. stictospora* (Engelm.) Small. From the latter *C. velleriflora* differs in its styles branches, from 1/2 to 2/3 bifid versus entire or briefly bifid in robustness, with cyathia greater than 1.2 mm tall, gland